

On Two New Localities of Columbite.—Prof. H. CARVILL LEWIS announced two new localities for the rare mineral, Columbite. Only a single specimen of this mineral has been described from Pennsylvania. An imperfect crystal was found in Nivin's quarry, Chester County, by Mr. Tyson, and noticed by Dr. Genth in his *Mineralogy of Pennsylvania* (p. 137).

Attention is now drawn to a beautiful doubly-terminated crystal which was found at Mineral Hill, Delaware County, and which is now in the cabinet of W. S. Vaux, Esq. The crystal is black, with a slightly iridescent surface, and is of about seven-eighths of an inch in length and half an inch in width. The following planes are present and have been determined by a hand goniometer, viz.: the macropinakoids $i\bar{i}$, the brachypinakoids $i\bar{i}$, the prisms I , the brachydiagonal prisms $i\bar{3}$, the basal pinakoids O , the brachydomes, $2\bar{4}$, and the brachydiagonal pyramids $1\bar{3}$.

The second locality is the well-known Dixon's quarry, Delaware. There is a large fragment of a crystal in the collection of the Academy marked on the authority of T. Fisher as from this locality. The specimen weighs over half a pound. Its nature was determined by its physical and blowpipe characters.

The occurrence of columbite at these localities is of some geological interest in connection with the determination of the age of the formation containing it, since the associated minerals are similar to those at the columbite localities of Massachusetts and Connecticut.

On the Occurrence of Fahlnite near Philadelphia.—Prof. LEWIS stated that he had found Fahlnite at two localities in the belt of hornblendic gneiss which crosses the northern part of the city. This belt of hornblendic gneiss, especially at its exposures at Frankford and near Germantown, has already yielded many minerals of interest, but fahlnite has not hitherto been noticed in Pennsylvania.

Fahlnite occurs disseminated in irregular masses in orthoclase at McKinney's quarry, Rittenhouse Street, and at Nester & Shelmire's quarry, on Wayne Street, Germantown. Only one specimen was found at the latter place. At McKinney's quarry it occurs in small, pale green masses, somewhat after the manner of the apatite of that locality. It has a scaly structure and a felspathic cleavage. It has a hardness of about 2.5. Its color is pale apple-green, and when heated it turns dark gray. It fuses at 4.5 to a dark grayish green opaque glass. It is nearly insoluble in acids. A rough analysis, made by fusing the mineral with sodic carbonate, showed that it consisted principally of silica and alumina, while containing small quantities of iron and magnesia and traces of lime and soda. It contains 2.8 per cent. of water. Although less hydrous, it resembles the variety of fahlnite

known as chlorophyllite, and is perhaps intermediate in character between pinitite and fahlunite.

All the specimens as yet collected have the aspect of pseudomorphs by alteration. Frequently there is no distinct line of demarkation between the fahlunite and the surrounding orthoclase, as though one passed into the other. At the line of junction the orthoclase sometimes becomes dull, while the fahlunite, which has its normal character in more central portions of the mass, becomes hard and resembles a greenish orthoclase. These features may be seen in the specimen presented to the Academy.

MAY 23, 1881.

On the Fossil Ores of Lycoming County.—MR. ABRAHAM MEYER described some outcrops of fossil iron ore in Lycoming County. He stated that the ore of Larry Creek formed veins having an average width of 2 feet, but occasionally being 4 feet thick. Those veins which are inclined at a high angle (70° – 80°) show slickensides on their surfaces, while the more horizontal veins have an oolitic structure. They yield 40 per cent. of metallic iron, although stated by the Geological Survey (Report F, p. 235) to contain only 16 per cent. Nodules of ore from Beatty's Run frequently contain a nucleus of carbonate of iron.

SEPTEMBER 26, 1881.

On a Mineral resembling Dopplerite from a Peat-bed at Scranton, Pa.—Prof. H. CARVILL LEWIS called attention to a very interesting substance recently found in a peat-bog at Scranton. In an excavation for the new court-house at that place, below a deposit of peat, "swamp-muck," and fallen trees, at a depth of some 25 feet from the surface, there occur veins of a black elastic substance which, when first excavated, was a stiff black jelly, but which after drying becomes brittle and nearly as hard as coal. The dried mineral resembles jet, having a brilliant lustre and a conchoidal cleavage. The peat-bog in which this substance was found is said to have been formerly a swamp or lake, which has been filled up in the extension of the town. The deposit of peat, which is covered by about 10 feet of rubbish, is over 15 feet in thickness and is said to burn well. Near the bottom of the peat, in a carbonaceous clay or "muck," the black jelly-like substance is found. It occurs in irregular veins, sometimes nearly perpendicular, throughout the lower portion of the peat, and these veins vary in thickness from a mere stain to $2\frac{1}{2}$ inches. Immediately below this deposit, and underlying the whole peat-bog, is a deposit of glacial till or "hardpan." This peat-bog, therefore, like the others so numerous throughout the glacial region, is of post-glacial age.

When the substance here described was first received, last July,